

How does exposure to traumatic events (TE) among combat Veterans influence the frequency of suicidal ideation among non-combat veterans?

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Abstract

This research takes a deeper look into some characteristics that influence veterans' thoughts regarding suicidal ideation over the past month, with a focus on differences between veterans who have been involved in combat operations and those who have not. A survey was carried out with all male veterans, ninety-two veterans in total aged between 20 and 67. It investigates topics such as involvement in specific campaigns, experiences in combat, and opinions on the adequacy of VA mental health services. The results showed that veterans who felt the VA health services were lacking had higher levels of suicidal thoughts, Age, participation in campaigns, combat experience, and race didn't notably influence the scores for thoughts of suicide in the past month. These discoveries highlight the importance of improving health services at the VA to provide support for veterans' mental well-being, helping reduce suicidal ideation overall.

Introduction

I am interested in this topic as a combat Veteran myself; these experiences have shaped my interest in the psychological effect on mental health regarding military service. The research question is: How does suicidal ideation differ between combat veterans and non-combat veterans?

Review of Literature

Suicide among the Veteran Population

Suicide among veterans is a never-ending battle. Britton, Ilgen, Valenstein, Knox, Claassen, and Conner (2012) recorded that 1800 Veterans using Veteran Health Administration (VHA) care die by suicide each year making up 5% to 6% of all suicides in the United States annually (Britton et al., 2012). Their findings estimated that veterans using VHA, services are 1.66 times higher among male veterans. Among these veterans using care through VHA, less than half of all were diagnosed with a mental health disorder (Britton et al., 2012). This begins to ask the question what is it that is influencing these numbers if not recognized mental health. Is it possible almost half of all veterans using VHA care could be going undiagnosed with a mental health disorder?

Nichter et al. (2023) reported suicidality polygenetic risk scores (PRS), while examining veterans. Greater trauma burden along with higher levels of PRS of the 122,935 of US military Veterans had the highest chance of lifetime suicide attempts at 16.6% in this study; 92.5% were male Veterans (Nichter et al., 2023).

Suicidality among Combat Veterans

Singh Rawat et al. (2023), using data from VHA records, found that traumatic brain injury (TBI) and/or posttraumatic stress disorder (PTSD) may put veterans at higher risks of suicide attempts as compared to veterans without TBI or PTSD. Their study found in a five year period of 6.7 million Veterans with at least two visits to VHA centers, 86,644 had at least one intentional self-harm treatment (Singh Rawat et al., 2023). Of those 6.7 million, 93,866 were diagnosed with TBI only, 892,420 with PTSD only, and 102,549 with both TBI/PTSD symptoms. These findings showed that veterans with at least one condition, PTSD or TBI,

were more likely to inflict self-harm. The evidence in their article suggests many Veterans struggle with these symptoms while struggling to seek adequate treatment that helps them through the VHA. They suggest VHA has made some push to lessen the overall logistical barriers for Veterans seeking care, like the creation of the community care program, enabling veterans to seek care inside a closer city, if VHA medical clinics are too far from some rural veterans. (Singh Rawat et al., 2023).

Doran, O'Shea and Harpaz-Rotem (2021) studied Veterans receiving mental health treatment for PTSD symptoms through the VHA, finding that many Veterans could have negative thoughts on seeking help after their time in service through the VHA due to effects of military culture, reenforcing masculine outlooks of stoicism that all males should be tough pushing away emotional experiences, and the need to express themselves.

Veteran Affairs Administration and the Treatment of Mental Health Disorders

When looking deeper into the treatment of veterans Doran et al., (2021) found that Between 11% and 20% of veterans who returned from recent campaigns like Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) have a form of PTSD compared to the 3.6% rate of the civilian populous with PTSD. The regular treatment among veterans is through two regular avenues at the VHA, Cognitive Processing Therapy (CPT) and Prolonged Exposure therapy (PE) (Doran et al., 2021). They found that veterans with combat exposure benefited the least overall with non-combat Veterans benefiting less than their civilian counterparts experiencing treatment of PTSD symptoms.

According to Santana, Eber, Barth, Cypel, Dursa, and Schneiderman, (2017) after deployments Veterans are more prone to serious health complications. Among deployed veterans, depression was the most common disease reported with 20.23% of 12,705 deployed

veterans (of the 19,829 experiencing it (Finley et al., 2015).

Methods

Sample Selection

Surveys were distributed online via a link on Facebook and Instagram where they could freely be shared to male veterans, additionally, the survey was shared at the Veteran resource center at College of the Canyons. Veterans ages ranged from 20 to 67 years old.

Data Collection

The sample consisted of 92 Veterans that completed the survey. The mean age of respondents was 37.7 years old. Seventy-seven-point two percent of respondents were white, 13% of respondents were Hispanic ethnicity of any race, 4.3% of respondents were Asian or Pacific Islander, 2.2% of respondents were Black or African American, 1.1% of respondents were Native American/American Indigenous and 2.2% of respondents were other, not specified above. The respondents were asked questions regarding involvement in recent military campaigns, Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation Inherent Resolve (OIR). Eighty-two-point six percent answered yes to being involved in at least one of these campaigns. They were also asked if they were directly involved in combat operations. Sixty-point nine percent answered yes to being directly involved in combat operations. Twenty-eight-point six percent of all respondents agree that Veterans affairs provides adequate mental healthcare for veterans.

Table 1. Demographic Characteristics of the Sample, N=92.

	N	%	Mean
Age (mean in years)			37.7
Race			
White	71	77.2	
Hispanic ethnicity of any race	12	13.0	
Black or African American	2	2.2	
Native American /American Indigenous	1	1.1	
Asian or Pacific Islander	4	4.3	
Other not specified above	2	2.2	
Participation in campaigns listed			
Operation Iraqi Freedom (OIF)			
Operation Enduring Freedom (OEF)			
Operation Inherent Resolve (OIR)			
Yes	76	82.6	
No	16	17.4	
Respondent directly involved in combat operations			
Yes	56	60.0	
No	36	39.1	
Respondents' agreement mental health support is adequate for veterans			
Yes	26	28.3	
No	65	70.7	

Operationalization of Concepts

I used The Suicidal Ideation Questionnaire (SIQ) from Psychological Assessment Resources, Inc. The scale, developed by William M. Reynolds, Ph.D., is designed to evaluate thoughts related to suicidal ideation among individuals. The SIQ consists of 15 items that measure various aspects of suicidal ideation. Each item presents a specific thought related to suicide, and respondents are asked to mark how often they have had each thought in the past month. Responses are coded from 1 (I never had this thought) to 7 (Almost every day). The mean is 2.462 for this scale and the alpha for these 15 items is .939 with a range of 3.857. The mean score for the SIQ in my sample was 2.462. Cronbach's alpha for the 15 items was 0.939, indicating excellent consistency. The range of responses was from 1 to 7, with a mean item range of 3.857. An alpha value of 0.939 suggests that the items on the SIQ are consistent and reliably measured. The high alpha value reflects that the SIQ is reliable for assessing suicidal thoughts. This allowed for an examination of each aspect related to veteran suicide for a broader understanding of the topic, providing a view from the community.

Results

Bivariate Analysis

Descriptive Statistics. When examining race by campaign participation I found that 63.0% of all participants answered yes to participating in the campaigns listed. but of whites 81.7% said yes, and of Hispanics 91.7% said yes and of those who said yes 76.4 white, 14.5% Hispanic.

When crosstabulating race by involvement in combat operations the largest race participating in combat operations were white 76.8%.

When looking at the crosstabulation between race by participants agreement that the VA provides adequate mental healthcare for veterans, I found whites agreement to be 73.1%

When looking at participations in the campaigns listed by involved in combat operations, I found of participants that were involved in the campaigns listed, yes 96.4% of them were involved in combat operations.

I cross tabulated participating in campaigns listed by agreement the VA provides adequate healthcare to veterans, I found that only 28% of veterans who participated in the campaigns listed were in agreement with the adequacy of mental health treatment at the VA.

Lastly, I cross tabulated veterans' involvement in combat operations by agreement the VA provides adequate mental healthcare for veterans 65.4% say yes, only 58.5% say no. finding that veterans who were involved in combat operations were less likely to be in agreement that the VA provides adequate mental healthcare with 18.7% expressing agreement.

Inferential Statistics. H1: As the age of veterans increases their score will increase on suicidal ideation scale. A correlation analysis was done to examine the relationship between the age of veterans and their scores on the suicidal ideation scale. The test showed no correlation ($r = -.128$), that was not significant ($p = .231$). The hypothesis that older veterans are more likely to report higher scores on the suicidal ideation scale is not supported, I reject my hypothesis.

H3: Veterans who have participated in campaigns listed are likely to report higher scale values than those who did not participate in the campaigns listed. I ran a t-test on these two variables. The findings indicated there is no significant difference in suicidal ideation scale scores between the two groups ($t = -.554$, $p = .581$) with participation in the military campaigns listed does not significantly affect the suicidal ideation levels in veterans. I reject my hypothesis.

H4: There are no significant differences in races for score on the suicidal ideation scale. A one-way ANOVA was done to examine the differences in suicidal ideation scale scores across racial groups of veterans. Race does not significantly affect suicidal ideation scores among veterans, of different racial groups ($p = .851$, $f = .395$, $df = 5$) I accept my hypothesis that there are significant differences in races for score on the suicidal ideation scale.

H5: Combat Veterans who were directly involved in combat operations are more likely to have a higher suicidal ideation score compared to those who were not involved in combat operations. I calculated a t-test on these two variables ($t = -.732$, $p = .233$), There is no significant difference in suicidal ideation scores between veterans who were directly involved in combat operations and those who were not. Direct combat involvement does not significantly impact the level of suicidal ideation among veterans.

H6: Veterans who think mental health services at the VA are inadequate have higher scores on the suicidal ideation scale compared to those who agree the services are adequate. I ran a t-

test on these two variables. The results of the t-test ($t = 3.621$) indicate a significant difference between the two groups. The analysis revealed a significant result with a ($p = < .001$), indicating a strong significant difference between the two groups. I accept my hypothesis that veterans who do not think the mental health services at the VA are adequate will have higher scores of suicidal ideations.

Discussion

My research intended to explore what influences thoughts of suicide among veterans. I found that factors such as age, participation in campaigns, combat experience, and racial diversity do not have an impact on suicidal thoughts among veterans. I did identify a correlation between dissatisfaction with mental health services provided by the VA and increased levels of suicidal ideation. These results indicate that aspects like veterans' age, military campaign involvement, and racial background may not play a major role in determining thoughts with suicidal ideation. This could be because these elements are either too general or not directly linked to experiences I tested. The differences based on these factors from my findings in studies suggesting that demographics and service history not be the most important aspects when it comes to understanding suicidal ideation among veterans.

The association between dissatisfaction with VA mental health services and the elevated suicidal ideation values highlights the importance of quality mental healthcare for this populus. Veterans who feel their health support is inadequate are more likely to struggle with intensified thoughts of suicide. My research shows that when veterans receive support and believe their mental health needs are being met, the likelihood of experiencing suicidal thoughts can decrease. Results pointed to the importance of improving the quality of mental health services provided by the VA in reducing suicidal ideation among veterans. This is helping with existing research stressing the significance of effective mental health care for veterans in managing and addressing the mental health challenges many face with current resource availability to get cared for in a timely manner.

Circumstances related to demographics and individual experiences while enlisted may not have a significant impact on suicidal ideation score; it still demonstrates the need to improve the VA mental health services to better serve Veterans' mental wellbeing. Additional research on this topic should look deeper into this study by gathering data on specific mental health services provided to help and build on the current studies and outcomes found.

Conclusion

In the future, researchers looking at factors influencing thoughts of suicide among veterans should look deeper into the quality and accessibility of health services provided. My findings show a correlation between dissatisfaction with VA health care and an increase in suicidal thoughts. More studies should focus on these services with their availability, how veterans see their effectiveness, and veterans' interactions with them. It is important to explore other qualitative methods like the impact of support networks and group therapy sessions. Understanding how these relationships affect veterans can help gain insights for prevention of suicidal tendencies. Methods like interviews could offer insights into Veteran's personal experiences and views on mental health care through the VA.

One significant limitation in this study was the lack of diversity among participants due to their service backgrounds and people whom I knew. Relying on a limited sample might have introduced bias that limited how broad my findings were in the short period of this study. My study tries to highlight how crucial it is for veterans' mental wellbeing to be satisfied with healthcare services provided to them, to decrease thoughts associated with suicide. It is important to address these in future studies pertaining to veterans' mental health.

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Appendix A: Suicidal Ideation Survey

This is a survey for my Sociology Research Methods class. Your experiences and insights are beneficial as we seek to better understand the relationship between potentially traumatic events (PTEs) and their impact on veterans' mental health and well-being.

By completing the survey, you give your consent to participate. The survey does not ask you for any personally identifying information and will be completely anonymous. You may choose to discontinue your participation at any time. You must be a male Veteran to complete this survey.

What is your racial or ethnic identification?

White

Hispanic ethnicity of any race

Black or African American

Native American/American Indigenous

Asian or Pacific Islander

Other not specified above

What is your age?

Did you participate in any of the campaigns listed below?

Operation Iraqi Freedom (OIF)

Operation Enduring Freedom (OEF)

Operation Inherent Resolve (OIR)

Yes

No

Were you **directly** involved in combat operations?

Yes

No

Do you believe that mental health support is adequate for veterans?

Yes

No

I thought it would be better if I was not alive.

Almost every day.

A couple of times a week

About once a week.

Couple of times a month.

About once a month.

I had this thought before but not in the
past month.

I never had this thought.

I thought about killing myself.

Almost every day.

A couple of times a week

About once a week.

Couple of times a month.

About once a month.

I had this thought before but not in the
past month.

I never had this thought.

I thought about how I would kill myself.

Almost every day.

A couple of times a week

About once a week.

Couple of times a month.

About once a month.

I had this thought before but not in the
past month.

I never had this thought.

I thought about when I would kill myself.

Almost every day.

A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought about people dying.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought about death.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought about what to write in a suicide note.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought about writing a will.

Almost every day.

A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought about telling people I plan to kill myself.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought about how people would feel if I killed myself.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I wished I were dead.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought that killing myself would solve my problems.

Almost every day.

A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought that others would be happier if I was dead.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I wished that I had never been born.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

I thought that no one cared if I lived or died.

Almost every day.
A couple of times a week
About once a week.
Couple of times a month.
About once a month.
I had this thought before but not in the
past month.
I never had this thought.

Appendix B: Suicidal Ideation Codebook

AGE_____ (Interval)

What is your age?

RACE (Nominal)

What is your racial or ethnic identification?

1. White
2. Hispanic ethnicity of any race
3. Black or African American
4. Native American/American Indigenous
5. Asian or Pacific Islander
6. Other not specified above

CMPGN (Nominal, Dichotomous)

Did you participate in any of the campaigns listed below?

Operation Iraqi Freedom (OIF)

Operation Enduring Freedom (OEF)

Operation Inherent Resolve (OIR)

0 No

1 Yes

COMBAT (Nominal, Dichotomous)

Were you **directly** involved in combat operations?

0 No

1 Yes

HEALTHCRE (nominal dichotomous)

Do you believe that mental health support is adequate for veterans?

0 No

1 Yes

Fill in the circle that best describes your own experiences.

NOTALIVE (Ordinal, Likert)

I thought it would be better if I was not alive.

- 7. Almost every day.
- 6. A couple of times a week
- 5. About once a week.
- 4. Couple of times a month.
- 3. About once a month.
- 2. I had this thought before but not in the past month.
- 1. I never had this thought.

KILMYSF (Ordinal, Likert)

I thought about killing myself.

- 7. Almost every day.
- 6. A couple of times a week
- 5. About once a week.
- 4. Couple of times a month.
- 3. About once a month.
- 2. I had this thought before but not in the past month.
- 1. I never had this thought.

HWKILMYSF (Ordinal, Likert)

I thought about how I would kill myself.

- 7. Almost every day.
- 6. A couple of times a week
- 5. About once a week.
- 4. Couple of times a month.
- 3. About once a month.
- 2. I had this thought before but not in the past month.
- 1. I never had this thought.

WENKILMYSF (Ordinal, Likert)

I thought about when I would kill myself.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.

PEPLEDYING (Ordinal, Likert)

I thought about people dying.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.

DEATH (Ordinal, Likert)

I thought about death.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.

SUICDENOTE (Ordinal, Likert)

I thought about what to write in a suicide note.

7. Almost every day.
6. A couple of times a week

5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.

WRTWIL (Ordinal, Likert)

I thought about writing a will.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.

TELLKILMYSF (Ordinal, Likert)

I thought about telling people I plan to kill myself.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.

FEELKILMYSF (Ordinal, Likert)

I thought about how people would feel if I killed myself.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.

1. I never had this thought.

DEAD (Ordinal, Likert)

I wished I were dead.

7. Almost every day.

6. A couple of times a week

5. About once a week.

4. Couple of times a month.

3. About once a month.

2. I had this thought before but not in the past month.

1. I never had this thought.

PROBLM (Ordinal, Likert)

I thought that killing myself would solve my problems.

7. Almost every day.

6. A couple of times a week

5. About once a week.

4. Couple of times a month.

3. About once a month.

2. I had this thought before but not in the past month.

1. I never had this thought.

HAPDEAD (Ordinal, Likert)

I thought that others would be happier if I was dead.

7. Almost every day.

6. A couple of times a week

5. About once a week.

4. Couple of times a month.

3. About once a month.

2. I had this thought before but not in the past month.

1. I never had this thought.

NEVRBRN (Ordinal, Likert)

I wished that I had never been born.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.

CARED (Ordinal, Likert)

I thought that no one cared if I lived or died.

7. Almost every day.
6. A couple of times a week
5. About once a week.
4. Couple of times a month.
3. About once a month.
2. I had this thought before but not in the past month.
1. I never had this thought.